

V.—*On some cases of Abrupt Variation in Indian Birds.*—By F. FINN,
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I. ALBINISTIC VARIATION IN *Dissemurus paradiseus*, *Æthiopsar fuscus*,
Acridotheres tristis, AND *Pavoncella pugnax*.

The albinistic and other varieties which so frequently occur everywhere among birds are too frequently passed over by ornithologists as mere "freaks" unworthy of careful consideration ; yet every now and then occurs an instance of sudden and abrupt variation, of a type which when found constantly is unhesitatingly allowed the rank of a species.

It is true that the majority of albinistic specimens belong to a form which appears no more capable of maintaining itself in nature than is the perfect pink-eyed albino ; at any rate, just as no pink-eyed species of bird exists in the wild state, so we also find that no *species* is splashed, pied, or mottled in the irregular manner characteristic of many domestic birds and of the usual pied variety which occurs in wild ones.

Such a specimen is the pied Bhimraj (*Dissemurus paradiseus*) figured on Plate I., in contrast with the type of the species named by me (J.A.S.B. LXVIII, Pt. II. p. 119) *Dissemurus alcocki* ; I have been induced to refigure the latter in order to show that it is no mere albinism. The pied bird had the base of the bill partly whitish, and even some of the rectal bristles white ; it is the only pied specimen of this species I have ever seen, and I have examined many, both alive and dead.

A more interesting and much rarer type of variety, however, is that in which the markings are similar to those occurring in a natural species. Such an one is the specimen of the Jungle Mynah (*Æthiopsar fuscus*) figured on plate II ; and catalogued by Anderson (Cat. Birds, Mus. As. Soc. interleaved Museum copy) as "577, one, albino, Moulmein, Major Tickell."* In this bird the general plumage is white, with the quills, both primary and secondary, and the tail feathers normally coloured. The greater coverts are partly white and partly normal, and thus I am inclined to suspect that this is a similar case to one which I have recently observed in the Common Mynah (*Acridotheres tristis*). In this bird the plumage was originally all white, with the eyes, bill and feet normal. Mr. Rutledge kept it for some time, and it began to change

* This colouration of white body and dark quills and tail is normal in the Javan *Graculipica melanoptera*, a bird which I was able to study in life in the London Zoological Gardens in 1901. Since writing this paper I have seen another grizzled specimen of *Dissemurus paradiseus*.

into the normal plumage, remaining for some time white with normal wings and tail, like the present bird. It is now in a very peculiar condition, being only scantily covered with feathers, some white and some normal. It has for a companion a normally-coloured bird, which, as I can personally testify, was once white, though not so completely so.

Another case of albinism of unusual interest is furnished by the white-headed form of the Ruff (*Paroncella pugnax*), which is apparently not uncommon, at all events in Eastern specimens of this bird. Though the male is so well known to be exceedingly variable when in summer plumage, it is as constant in colour during the winter as other birds. Yet every now and then there appears a specimen in winter plumage with the head and neck more or less white, varying from complete whiteness of these parts to merely a white nape and unusually white fore-neck. All of the birds thus characterized are adults, as is shown by their orange or flesh-coloured feet (these being olive in the young); and the females or Reeves are thus affected as well as the Ruffs, but far more rarely and to a less extent.

In the stuffed pair figured in Plate III., which are part of the Asiatic Society's collection, and were procured by Blyth during the years 1842-1846, the whole head and neck are white with the exception of the crown, which is mostly normal, and of some scattered brown feathers on the neck. They are numbered 1601B (the female) and 1601K (the male).

In a skin (2340 in the Museum Register) procured on in the Calcutta Bazaar, February 19th, 1875 evidently a male from the dimensions, the whole head, neck and upper breast are white, there are a few white feathers on the upper back, and the coverts along the fore-arm and carpus are partly white. This is figured in the plate, together with another male (Reg. No. 24005) obtained this winter (January 30th, 1902), which is even whiter, having more white feathers on the back and fore-arm, and one tertiary white. In this the feet and base of bill were flesh-coloured; the eyes normal.

Six more specimens of the variation have been obtained by me in the Calcutta Bazaar during the present winter, all being adult males. One (Reg. No. 24006) is whiter than either of those figured, having the upper back largely white, as well as all the head and breast, but no abnormal amount on the wings.

The second whitest specimen, (Reg. No. 24007) procured on February 2nd, has a white head and neck, with normally coloured feathers round the face; it had the feet and base of bill orange.

Of the others, one, procured on February 16th (Reg. No. 24018) closely resembles Blyth's male figured; another, procured on February

3rd (Reg. No. 24024) is also similar, but has the back of the neck normal; one, procured on February 22nd (Reg. No. 24019) has the head normal and the neck white all round; and a rather small specimen, obtained on February 11th (Reg. No. 24008) has the neck all white in front and the head and back of the neck merely mottled with white.

This nearly approaches the normal form, in which the fore-neck shows a varying amount of white; but any white on the crown or nape may fairly be called an abrupt variation.

I have not this year been able to procure any specimens of this variety in good enough condition to keep alive, but early last year I was more fortunate, and got two pairs, most of which are still living in the Alipore Zoological Garden. Both males much resemble the mounted male figured, but one has some tertiaries white in both wings at the present time, though when obtained it only showed white in one wing. The one female which remains alive merely has the neck white all round.

During last winter I remember seeing one male largely white-necked, which was dead, and I therefore did not buy it, not then attaching so much importance to the variety, as I had seen so few.

It is only during the last two winters that I have taken special notice of this species, but I could not very well have overlooked the conspicuous white-headed form had it occurred commonly before; and it is to be noted that these last two winters have been noteworthy for unusually numerous occurrences of the Bronze-capped Teal (*Eunetta falcata*) in the Bazaar, a bird usually decidedly rare in India. It is possible, therefore, that these white-headed Ruffs are an Eastern strain, which, like the duck above-mentioned, only occasionally migrate in a westerly direction. It will be noticed also that during the years 1842-46 that Blyth procured his specimens, he also got the Clucking Teal (*Nettion formosum*) and Eastern White-eyed Pochard (*Nyroca baeri*), also eastern irregular visitants to our empire.

As out of so many specimens of this variety seen by me only three were females, we may conclude that the variation is largely limited to the male, Reeves here at all events being much more numerous than Ruffs. I have above shown that it only occurs in old birds, and thus I am inclined to look on it as a species of senile albinism analogous to what occurs in black varieties of the domestic fowl and duck. I have also seen an ageing green Canary turn largely yellow about the head.

At the same time, these white-marked individuals are not at all wanting in vigour; the two white-headed males at the Calcutta Zoological Gardens have survived while all the normally coloured Ruffs procured that winter (1900-01) have died, though kept under similar

conditions; and one now, although crippled to a great extent in one wing, is master of most if not all the normally coloured Ruffs again placed with him in another aviary. Yet a Reeve, which was at first his sole companion of the species, seems to have deserted him for a normally coloured bird.

The only-slightly-mottled specimen alluded to above also, though undersized and slightly lame, often attacked and beat a larger, though younger, normally-coloured male confined with it, which was sound.

In conclusion, it seems to me, that whether the unusual number of this variety which have appeared of late is due to an abnormal westerly migration or not, it seems to be a well-marked and definable form, liable to recur again and again, and very probably hereditary; thus it would be likely to increase, unless checked by natural or sexual selection.

The Ruff could probably afford to run a greater risk than most birds, as it is evidently a vigorous species, more hardy of constitution, courageous, and indiscriminate in its diet than most *Limicolæ*; this is shown by its readiness to eat vegetable as well as animal food, its habit of constantly fighting, in which both sexes indulge as well in winter as in summer, and its power of recovering from injuries and enduring so unnatural a climate as that of Bengal.

As it is desirable to distinguish a well-marked and recurrent aberration like this by a subspecific name, I venture to suggest that it be known as *Pavoncella pugnax leucoprora*.*

II. NOTE ON THE *Gallus pseudhermaphroditus* OF BLYTH.

With the attention that is now being paid to the variation of animals under domestication, it may not be *mal à propos* to recall to the memory of naturalists the curious variety of the fowl described many years ago, though doubtfully, by Blyth, under the name of *Gallus pseudhermaphroditus*. The specimen is alluded to in his catalogue of the birds in the collection of the Asiatic Society under No. 1463 as "P. Singular individual (?) variety, from Mergui, described as *G. pseudhermaphroditus*, J.A.S.X, 925. Rev. J. Barbe (1841)."

The specimen still exists, and, unlike too many of Blyth's birds, has suffered little deterioration, and hence I have thought it advisable to give a figure of it here (Plate II), as I have never seen or heard of a similar variation myself. I also reproduce below the original description from page 925 of the tenth volume of our Society's Journal, since this is not very readily accessible now-a-days :—

* *Diagnosis*—*Exemplis hibernis P. pugnacis similis, sed capite et nuchâ aut omnino albis aut albo variegatis distinguenda.*

"*Gallus pseudhermaphroditus*, Nobis, N.S. ? — A very singular bird, which, if I was not positively assured, was a male in normal plumage, I should have suspected to be either an individual of mingled sex, or possibly an aged male ; for that it is not a female in partially masculine attire is evident from the size of its comb and wattles, and especially of its spurs. Size of an English game cock, or larger than the male *G. Bankivus*, having much stouter legs, the spurs of which are $1\frac{1}{2}$ inches long ; comb and wattles as in the *G. Bankivus*, but the former more entire towards the front (possibly a mere individual diversity) : the tail is that of a cock bird of this genus, but scarcely more developed than in the *Euplocomi* (as *Eu. albocristatus*) ; in other respects the plumage is altogether that of an ordinary brown hen, having a redder cast than in the female *G. Bankivus*, especially on the wings ; tail coloured as in an ordinary male. Length about 2 feet, of which the middle tail feathers occupy 10 inches, wing from bend 9 inches, and tarse behind, to back toe, $2\frac{3}{4}$ inches. I am informed that this species is never clad in the usual bright plumage of other male birds of its genus."

The specimen now only shows one long central tail-feather or "sickle," the other having apparently been broken, since there is a large broken feather on the opposite side of the tail. From the look of the comb and the coarse legs with abnormally enlarged anterior scales, there can be little doubt that the bird was really a domestic one ; and if its peculiarities were as a matter of fact racial, it would seem that there has existed in the east, a breed of which the cocks bore more or less feminine plumage, comparable to the "Henny" game still existing in England ; which, however, are *altogether* hen-feathered.

I have never seen any hen-feathered cocks among the very variable domestic poultry which occupy the coops in the Calcutta Bazaar ; and I should like here to draw attention to the fact that the operation of caponizing, so frequently performed in India, results in more finely-developed male plumage in the cockerels operated on, although their combs and wattles do not develop fully, but remain like those of hens.




PLATE I.



DISSEMURUS
PARADISEUS, VAR.

DISSEMURUS
ALCOCKI.

DISSEMURUS
PARADISEUS, VAR.

DISSEMURUS
ALCOCKI.



GALLUS PSEUDHERMAPHRODITUS

ÆTHIOPSAR FUSCUS, *Var.*

PLATE III.



Female (1842-46).
Male (Jan. 30th, 1902).

PAVONCELLA PUGNAX LEUCOPRORA.

Male (1842-46).
Male (Feb. 19th, 1875).